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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,719	06/27/2003	Likan Liang	02-850-CIP	9414
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900 CHAPEL STREET				
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EXAMINER				
TRAN, SUSAN T				
ART UNIT		PAPER NUMBER		
1615				

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

Application No.

10/607,719

Applicant(s)

LIANG ET AL.

Examiner

Susan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_

3) ☐ Notice of Publication (PTO-152)

### DETAILED ACTION

Réceipt is acknowledged of applicant's Request for Extension of Time and  
Amendment filed 02/03/05.

### Claim Objections

Claims 6 and 18 are objected to because of the following informalities:

Claim 6, line 4, after the word "polyethylene glycol monoethers", the ".,," should  
read ".,".

Claim 18, line 2, there is a period "." after "TriCor®".

Appropriate correction is required.

### Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The obviousness type double patenting rejections of claims 1-3, 5-9, 12, 13, 17  
and 19 over copending application 10/324,954 have been withdrawn in view of

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applicant's argument. Applicant's remarks dated 02/03/05 at page 8, states that copending applications 10/324,954 contains claims directed to formulations where a hydrophobic active ingredient is dissolved in a solubilizer such that the active ingredient forms a solution upon administration. By contrast, the present invention is directed to formulations that are self-emulsifying upon administration.

Claims 1-3, 6, 9, 10, 12-15 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10/324,953 ('953). Although the conflicting claims are not identical, they are not patentably distinct from each other because application '953 claims an oral pharmaceutical formulation of a fibrate with improved oral bioavailability comprising fenofibrate, derivative or mixtures thereof, dissolved in one or more fibrate solubilizers selected from N-alkyl derivative of 2-pyrrolidone, mono- or di- or polyethylene glycol monoether, C<sub>8-12</sub> fatty acid mono- or diesters of propylene glycol, or combinations thereof, and one or more surfactants selected from nonionic, anionic, cationic, and zwitterionic surfactants and combinations thereof, wherein the fibrate to the solubilizer weight ratio is between about 1:1 and about 1:100. Self-emulsifying formulation is found in claim 4. Diethylene glycol monoethyl ether is found in claim 11. Therefore, one of ordinary skill in the art would expect the same formulation of fenofibrate from the use of the claimed invention given the claims of application '953. There are no unusual and/or unexpected results, which would rebut prima facie obvious. As such, the claimed invention would have been obvious given the

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claims of '953, which set out a similar formulation of combination of hydrophobic active agent, solubilizing agent, and stabilizing agent.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant requested that the obviousness-type double patenting over claims 1-21 of copending Application No. 10/324,953 ('953) be held in abeyance until the indication of allowable subject matter in the instant application, at which time applicant will consider the filing of a suitable terminal disclaimer.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laruelle US 5,827,536, in view of Chen et al. US 6,267,985.

Laruelle discloses a pharmaceutical dosage formulation comprising fenofibrate dissolved in a solubilizing agent of diethylene glycol monoethyl ether (DGME). The weight ratio of DGME and fenofibrate is between 10 and 20, which is 1:2, and would fall within the claimed range of 1:1 to 1:16 (column 3, lines 20-22; claims 2 and 7). The formulation further comprises additives capable of increasing the solubilizing power of DGME and/or of increasing the stability of the solution (column 3, lines 23-33). The

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formulation is administered for the treatment of hypercholesterolaemias and hypertriglyceridaemias (column 2, lines 52-58). Laruelle also teaches a process for improving the bioavailability of fenofibrate by dissolving fenofibrate in DGME (column 3, lines 55-67).

Laruelle is silent as to the teaching of additional ingredients, such as, surfactant, and stabilizing agent.

Chen teaches a pharmaceutical composition comprising hydrophobic therapeutic agent including fenofibrate (column 28, lines 40-49; and column 29, line 66); at least two surfactants selected from hydrophilic and hydrophobic surfactants (column 26, lines 32-51); and mixtures of solubilizers (column 34, lines 29-30). Hydrophobic surfactant is compounds having HLB value less than about 10 (column 8, lines 35-41) that includes fatty acids (column 26, lines 52-67); and hydrophilic surfactant is compounds having HLB greater than 10 (ID). Solubilizers include polyvinyl alcohol, cellulose derivatives, 2-pyrrolidone, and N-methylpyrrolidone (column 34, lines 5-17). The composition further comprises other additives, such as binders, fillers, viscomodulators, and mixtures thereof (column 35, lines 43-52). The pharmaceutical composition is formulated as preconcentrate in a liquid (column 35, lines 54-57). Thus, it would have been obvious for one of ordinary skill in the art to modify the composition of Laruelle using the additional ingredients in view of the teachings of Chen, because Laruelle teaches a fenofibrate formulation comprises solubilizer and other additives capable of increasing the solubilizing power of DGME and of increasing the stability of the composition (ID), because Chen teaches the use of solubilizer to enhance the solubility of hydrophobic

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drug (column 33, lines 63-65), because Chen teaches combination of surfactants can solubilize therapeutically effective amounts of therapeutic agents in homogeneous systems, which are a thermodynamically stable and optically clear (column 4, lines 58-61), and because Chen teaches the composition that enhanced rate and/or extent of absorption of the therapeutic agent (column 5, lines 1-3). The expected result would be a stable preconcentrate formulation of fenofibrate in combination with triglyceride, mixture of surfactants, and mixture of solubilizing agents.

It is noted that the references do not explicitly teach the amounts of all the ingredients. However, Generally, differences in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Therefore, it is the position of the examiner that it would have been obvious for one of ordinary skill in the art to, by routine experimentation determine suitable amounts of ingredients with the expectation of at least similar result, because the references teach similar pharmaceutical composition the same compound, namely fenofibrate, using similar solubilizer, similar stabilizing agent, as well as similar surfactants, for the same use, e.g., for the treatment of hyperlipidaemias and hypertriglyceridaemias.

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Regarding the C<sub>max</sub> and the AUC, the burden is shifted to applicant to show that the formulations taught by the cited prior arts do not exhibit the claimed C<sub>max</sub> and AUC.

The PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]. *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980). See also *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Applicant's attention is called to Laruelle at column 1, lines 1-10 discloses formulations exhibit a significantly improved bioavailability or "superbioavailability". Chen at column 4, lines 66 through column 5, lines 1-3 discloses formulations that result in an enhanced rate and/or extent of absorption of the therapeutic agent.

### ***Response to Arguments***

Applicant's arguments filed 02/03/05 have been fully considered but they are not persuasive.

Applicant argues that there is no motivation to combine Laruelle and Chen, because Laruelle does not teach a composition comprising any other defined ingredient. Regarding the components to increase the solubility and stability of the fenfibrate taught by Laruelle at column 3, applicant argues that Laruelle does not teach either the nature of amounts of these additives. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800



F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both references recognize the use of additives, such as solubilizing agent, stabilizing agent, surfactant, and the like to obtain a homogeneous fenofibrate system, and to improve the bioavailability of fenofibrate.

Applicant argues that Chen teaches that triglyceride is a mandatory component of the formulation and then provides huge laundry lists of possible hydrophobic ingredients. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Furthermore, Chen specifically discloses the use of at least two surfactants selected from hydrophilic and hydrophobic surfactants out side of the list of additives to be added to the formulation (column 26, lines 32-51).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan T. Tran whose telephone number is (571) 272-0606. The examiner can normally be reached on M-R from 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page, can be reached at (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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